

Amendments to the claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (CURRENTLY AMENDED) Seed of A seed of cotton line cotton cultivar designated 03Q301DR DP 543 BGII/RR, wherein a representative sample of seed of said line said cultivar having been was deposited under ATCC Accession No. PTA-5857.

2. (ORIGINAL) A cotton plant, or a part thereof, produced by growing the seed of claim 1.

3. (ORIGINAL) A tissue culture of regenerable cells produced from the plant of claim 2.

4. (ORIGINAL) Protoplasts produced from the tissue culture of claim 3.

5. (CURRENTLY AMENDED) The tissue culture of claim 3, wherein cells of the tissue culture are from a tissue plant part selected from the group consisting of leaf, pollen, embryo, root, root tip, anther, pistil, flower, seed, boll and stem.

6. (CURRENTLY AMENDED) A cotton plant regenerated from the tissue culture of claim 3, said plant having all the morphological and physiological characteristics of line 03Q301DR cultivar DP 543 BGII/RR, representative seed of said line having cultivar having been deposited under ATCC Accession No. PTA-5857.

7. (CURRENTLY AMENDED) A method for producing an F1 hybrid cotton seed, comprising wherein the method comprises crossing the plant of claim 2 with a different cotton plant and harvesting the resultant F1 hybrid cotton seed.

8. (ORIGINAL) A hybrid cotton seed produced by the method of claim 7.

9. (CURRENTLY AMENDED) A hybrid cotton plant, or parts or a part thereof, produced by growing said hybrid seed of claim 8.

10. (CURRENTLY AMENDED) A method of producing a cotton seed by seed wherein the method comprises growing said hybrid cotton plant of claim 9 and harvesting the resultant seed.

11. (CURRENTLY AMENDED) A method for producing a male sterile cotton plant comprising wherein the method comprises transforming the cotton plant of claim 2 with a nucleic acid molecule that confers male sterility.

12. (ORIGINAL) A male sterile cotton plant produced by the method of claim 11.

13. (CURRENTLY AMENDED) A method of producing an herbicide resistant cotton plant comprising wherein the method comprises transforming the cotton plant of claim 2 with a transgene that confers herbicide resistance.

14. (ORIGINAL) An herbicide resistant cotton plant produced by the method of claim 13.

15. (CURRENTLY AMENDED) The cotton plant of claim 14, wherein the transgene confers resistance to an herbicide selected from the group consisting of: consisting of imidazolinone, sulfonylurea, glyphosate, glufosinate, L-phosphinothricin, triazine and benzonitrile.

16. (CURRENTLY AMENDED) A method of producing an insect resistant cotton plant comprising wherein the method comprises transforming the cotton plant of claim 2 with a transgene that confers insect resistance.

17. (ORIGINAL) An insect resistant cotton plant produced by the method of claim 16.

18. (ORIGINAL) The cotton plant of claim 17, wherein the transgene encodes a *Bacillus thuringiensis* endotoxin.

19. (CURRENTLY AMENDED) A method of producing a disease resistant cotton plant comprising wherein the method comprises transforming the cotton plant of claim 2 with a transgene that confers disease resistance.

20. (ORIGINAL) A disease resistant cotton plant produced by the method of claim 19.

21. (CURRENTLY AMENDED) A method of producing a cotton plant with modified fatty acid metabolism or modified carbohydrate metabolism comprising wherein the method comprises transforming the cotton plant of claim 2 with a transgene

encoding a protein selected from the group consisting of stearyl-ACP desaturase, fructosyltransferase, levansucrase, alpha-amylase, invertase and starch branching enzyme.

22. (CURRENTLY AMENDED) A cotton plant having modified fatty acid or modified carbohydrate metabolism produced by the method of claim 21.

23. (CURRENTLY AMENDED) A cotton plant, or part or a part thereof, having all the physiological and morphological characteristics of the line 03Q301DR cultivar DP 543 BGII/RR, representative seed of said line said cultivar having been deposited under ATCC Accession No. PTA-5857.

24. (CURRENTLY AMENDED) A method of introducing a desired trait into cotton line 03Q301DR cultivar DP 543 BGII/RR comprising wherein the method comprises:

- (a) crossing 03Q301DR DP 543 BGII/RR plants grown from 03Q301DR DP 543 BGII/RR seed, representative seed of which has been deposited under ATCC Accession No. PTA5857 PTA-5857, with plants of another cotton line cotton cultivar that comprise a desired trait to produce F1 progeny plants, wherein the desired trait is selected from the group consisting of male sterility, herbicide resistance, insect resistance and disease resistance;
- (b) selecting F1 progeny plants that have the desired trait to produce selected F1 progeny plants;
- (c) crossing the selected progeny plants with the 03Q301DR DP 543 BGII/RR plants to produce backcross progeny plants;
- (d) selecting for backcross progeny plants that have the desired trait and physiological and morphological characteristics of cotton line 03Q301DR cultivar DP 543 BGII/RR listed in Table 1 to produce selected backcross progeny plants; and
- (e) repeating steps (c) and (d) one or more times in succession to produce selected second or higher backcross progeny plants that comprise the

desired trait and all of the physiological and morphological characteristics of cotton ~~line~~ 03Q301DR cultivar DP 543 BGII/RR listed in Table 1 as determined at the 5% significance level when grown in the same environmental conditions.

25. (CURRENTLY AMENDED) A plant produced by the method of claim 24, wherein the plant has the desired trait and all of the physiological and morphological characteristics of cotton ~~line~~ 03Q301DR cultivar DP 543 BGII/RR listed in Table 1 as determined at the 5% significance level when grown in the same environmental conditions.

26. (CURRENTLY AMENDED) The plant of claim 25 wherein the desired trait is herbicide resistance and the resistance is conferred to an herbicide selected from the group ~~consisting of:~~ consisting of imidazolinone, sulfonylurea, glyphosate, glufosinate, L-phosphinothricin, triazine and benzonitrile.

27. (ORIGINAL) The plant of claim 25 wherein the desired trait is insect resistance and the insect resistance is conferred by a transgene encoding a *Bacillus thuringiensis* endotoxin.

28. (ORIGINAL) The plant of claim 25 wherein the desired trait is male sterility and the trait is conferred by a cytoplasmic nucleic acid molecule that confers male sterility.